users. The higher incidence of severe complications with non-selective NSAID resulted, despite of a lower acquisition price, in higher costs of those medications compared to meloxicam.

PAR13

ANNUAL TREATMENT COSTS OF PATIENTS WITH RHEUMATOID ARTHRITIS WITH METOTREXATE AND LEFLUNOMIDE IN SPAIN

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OBJECTIVES: To compare, in the Spanish setting, the annual costs associated with the management of adult patients with rheumatoid arthritis using oral leflunomide (Arava®) or a new presentation of metotrexate (Metoject®, prefilled syringes). **METHODS:** Due to the absence of any randomized controlled trial that had showed significant differences in effectiveness between leflunomide and metotrexate a cost-minimization analysis has been performed under the Spanish societal perspective. Data about effectiveness and dose of drugs administered were obtained from the clinical trial US310, a 12 months-randomised controlled trial which compares head-to-head 20 mg daily of leflunomide versus 7.15–15 mg weekly of metotrexate. Use of other medical resources like lab tests and consultations related with drug monitoring were derived from the manufacturers' summary of product characteristics. Patient time and productivity time lost were derived from other published studies and economic evaluations. **RESULTS:** Annual drug costs with leflunomide and prefilled syringes of metotrexate are 1,112.52€ and 1,438.91€ respectively. Annual monitoring costs amount 680.76€ and 710.26€ respectively. Other direct medical costs equal up to 677€ and 542€ while indirect costs amount 862€ and 577€ respectively. **CONCLUSION:** Metoject®, a new presentation of metotrexate has been recently launched in Spain. The significant rise in price of Metoject® compared with other presentations of metotrexate justifies performing an economic evaluation comparing it with the administration of oral leflunomide (Arava®). Arava® has lower drug and monitoring related costs than Metoject®, while not statistically significant differences in other direct and indirect costs have been observed between the treatments.

PAR14

COST MINIMIZATION ANALYSIS OF RITUXIMAB VERSUS INFLIXIMAB, ADALIMUMAB AND ETANERCEPT FOR RHEUMATOID ARTHRITIS FROM A PAYER PERSPECTIVE IN BRAZIL

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OBJECTIVES: Rituximab is an anti-CD20 monoclonal antibody with demonstrated efficacy for patients with rheumatoid arthritis who had inadequate response to anti-TNF therapies (Cohen et al. 2005). The primary objective of this analysis was to estimate the total cost of rituximab therapy and to compare it with infliximab, adalimumab and etanercept under a private payer perspective in Brazil. A budget impact analysis (BIA) of the incorporation of rituximab was also performed. **METHODS:** We assumed the same efficacy for the comparators as there is not any head-to-head clinical trial available until date and indirect comparisons showed higher ACR response rates for Mabthera. Direct annual medical costs for biological drugs, IV administration, weekly metotrexate (MTX) and routine exams were taken from a Delphi panel with Brazilian rheumatologists. Base case dosages considered were: rituximab (2 g at every 8 months), infliximab (4 mg/kg at weeks 0, 2, 6 and then at every 8 weeks); adalimumab (40 mg every other week) and etanercept (50 mg per week). Local administration costs were obtained from Scheinberg et al. (2005). Costs were reported in 2007 Brazilian Reais and discounted at a 5% rate in the BIA. Therapies were evaluated using a 5-year horizon. In order to assess uncertainty, one and two-way sensitivity analyses were also performed. **RESULTS:** In the base case scenario, rituximab therapy resulted in a total annual cost of R$ 45,647 per patient. Total annual costs per patient for infliximab, adalimumab and etanercept were R$ 78,638; R$ 89,943 and R$ 119,170 respectively. In the BIA, rituximab therapy resulted in total savings of R$ 91,006,061 in 5 years. Results were sensitive to dosage schedule (rituximab and infliximab) and drug acquisition costs. **CONCLUSION:** Results suggest that therapy with rituximab is a cost-saving alternative for patients with rheumatoid arthritis in the Brazilian private health care system, unfettering resources for other disease areas.

PAR15

IMPACT OF CO-MORBIDITY BURDEN ON REAL WORLD HEALTH CARE COSTS IN RHEUMATOID ARTHRITIS PATIENTS INITIATING ANTI-TUMOR NECROSIS FACTOR THERAPY

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OBJECTIVES: Evaluate the impact of co-morbidity on the real world health care costs of rheumatoid arthritis (RA) patients who received anti-tumor necrosis factor (anti-TNF) therapy. **METHODS:** A retrospective study was conducted using the HealthCore Integrated Research Database from Blue Cross Blue Shield plans. The study population consisted of RA patients initiating anti-TNF therapy (adalimumab, etanercept or infliximab) between January 1, 2003 and June 30, 2005 (index date). All patients had >=6 months continuous plan enrollment before and >=12 months after the index date of initiating anti-TNF therapy. All-cause health care costs (inpatient, emergency department visits, office visits, outpatient services, non-TNF prescription drugs) were calculated for the 6-month baseline pre- and 12-month post-index periods. A generalized linear model was developed to assess the association between comorbidity burden, as assessed by the Charlson Co-morbidity Index (CCI), and total all-cause health care costs post-index period while controlling for other potential confounding variables. Comparisons were made between two mutually exclusive cohorts based on the co-morbidity level, DCI > 0 vs. DCI = 0 (no co-morbidity). **RESULTS:** In total, 2405 RA patients were analyzed; 71% were female and the mean age was 48 years. During the 6 month pre-index period, 16% of patients were identified with osteoarthritis, 12% with hypertension, 8% with diabetes, and 4.5% with cardiovascular events. After adjusting for baseline all-cause health care costs, age, gender, anti-TNF use, and several comorbidities of interest (osteoarthritis, hypertension, diabetes, and cardiovascular events), patients in the DCI > 0 cohort (n = 1832) had 12% higher total all-cause health care costs ($6795 vs. $6072) compared with patients in the DCI = 0 cohort (n = 573) after initiation of anti-TNF therapy ($P < 0.0001$). **CONCLUSION:** High co-morbidity burden among RA patients on anti-TNF therapy is associated with an increase in total all-cause health care costs. Additional analyses are recommended to determine the clinical, economic and humanistic outcomes associated with the use of anti-TNF therapies.